

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A dual capacity compressor, comprising:

a power generating part including a reversible motor and a crank shaft inserted in the motor;

a compression part including a cylinder, a piston positioned in the cylinder, and a connecting rod connected to the piston;

a crank pin provided at an upper part of the crank shaft, eccentric from an axis of the crank shaft;

an eccentric sleeve having an inner circumferential surface that is rotatably fitted within an outer circumferential surface of the crank pin, and an outer circumferential surface that is rotatably fitted to an end of the connecting rod; and

a key member engaged with a portion of the eccentric sleeve so as to couple the eccentric sleeve and the crank pin in all rotation directions of the motor and provide for a plurality of compression capacities based on an effective amount of eccentricity and a piston displacement following a change in direction of rotation of the motor, and to prevent relative motion between the crank pin and the eccentric sleeve during operation regardless of the direction of rotation of the motor, wherein the eccentric sleeve includes a balance weight that rotates with the eccentric

sleeve so as to shift a center of gravity of the eccentric sleeve during rotation and maintain the engagement between the key member and the eccentric sleeve.

2. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member engages the eccentric sleeve at a plurality of points.

3. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member engages the eccentric sleeve at two points aligned relative to a center line in any direction during operation.

4. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein a length of the key member is greater than an outside diameter of the crank pin.

5. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member is continuously engaged with at least a part of the eccentric sleeve positioned in a radial direction at an inner portion of the crank shaft.

6. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member includes:

a first projection that projects through the crank pin to an outer side of the crank pin by a

first predetermined length; and

a second projection that projects through the crank pin to an outer side of the crank pin by a second predetermined length only during operation.

7. (Previously Presented) The dual capacity compressor as claimed in claim 6, wherein the first projection projects continuously in a radial direction through the crank pin.

8. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member prevents rotation of the eccentric sleeve due to a centrifugal force applied thereto, and a corresponding rotational moment.

9. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member is continuously engaged with at least a part of the eccentric sleeve so that a rotational moment is generated at the eccentric sleeve in a direction opposite to the rotation direction of the crank shaft.

10. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member is continuously engaged with at least a part of the eccentric sleeve positioned in a radial direction at an outer portion of the crank shaft.

11. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member includes:

a first projection that projects through the crank pin to an outer side of the crank pin; and

a second projection that projects through the crank pin to an outer side of the crank pin and is engaged with the eccentric sleeve during operation of the compressor.

12. (Previously Presented) The dual capacity compressor as claimed in claim 11, wherein the first projection projects in a radial direction to the outer side of the crank shaft.

13. (Previously Presented) The dual capacity compressor as claimed in claim 11, wherein the second projection projects through the crank pin such that the second projection does not interfere with the eccentric sleeve when the compressor is stationary.

14. (Original) The dual capacity compressor as claimed in claim 11, wherein the second projection includes a channel for passing the eccentric sleeve when the compressor is stationary.

15. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the key member includes a stopper positioned in the crank pin so as to limit movement of the key member relative to the crank pin.

16. (Previously Presented) The dual capacity compressor as claimed in claim 15, wherein a contact surface of the stopper conforms to a corresponding inner circumferential surface of the crank pin.

17. (Previously Presented) The dual capacity compressor as claimed in claim 15, wherein the stopper comprises a first stopper that limits movement of the key member in a first direction.

18. (Previously Presented) The dual capacity compressor as claimed in claim 17, wherein the stopper further comprises a second stopper that limits movement of the key member in a second direction that is opposite the first direction.

19. (Previously Presented) The dual capacity compressor as claimed in claim 15, wherein the key member further comprises an elastic member that supports continuous projection of at least a part of the key member through the crank pin regardless of a state of operation of the compressor.

20. (Previously Presented) The dual capacity compressor as claimed in claim 19, wherein the elastic member limits movement of the key member in a first direction.

21. (Previously Presented) The dual capacity compressor as claimed in claim 19, wherein the elastic member provides a non-uniform elastic force.

22. (Previously Presented) The dual capacity compressor as claimed in claim 19, wherein an elastic force of a first part of the elastic member is greater than an elastic force of a second part of the elastic member.

23. (Previously Presented) The dual capacity compressor as claimed in claim 19, wherein a part of the elastic member has an elastic force that is greater than a centrifugal force generated by the key member.

24. (Previously Presented) The dual capacity compressor as claimed in claim 19, wherein the elastic member includes:

a first elastic member that contacts the key member; and

a second elastic member positioned between the first elastic member and an inner circumferential surface of the crank pin, wherein an elastic force of the second elastic member is greater than that of the first elastic member.

25. (Previously Presented) The dual capacity compressor as claimed in claim 24, wherein the elastic force of the second elastic member is greater than a centrifugal force

generated by the key member.

26. (Previously Presented) The dual capacity compressor as claimed in claim 24, wherein the first elastic member is a spring having a first diameter, and the second elastic member is a spring that extends from the first elastic member and that has a second diameter that is greater than the first diameter.

27. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the crank pin includes a pair of key member fitting parts provided opposite to each other.

28. (Previously Presented) The dual capacity compressor as claimed in claim 27, wherein the key member fitting parts comprise through holes formed in a wall of the crank pin.

29. (Previously Presented) The dual capacity compressor as claimed in claim 27, wherein the key member fitting parts include at least one slot that extends from a top end of a wall of the crank pin to a predetermined position in the wall.

30. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the eccentric sleeve includes:

a track part formed along a direction of a body thereof so as to allow rotation of a projection of the key member that projects through the crank pin; and

a limiting part provided with the track part to limit rotation of the projection of the key member.

31. (Previously Presented) The dual capacity compressor as claimed in claim 30, wherein the track part of the eccentric sleeve comprises a cut away part that extends from a top end of the eccentric sleeve to a predetermined depth, and along a circumferential direction of the eccentric sleeve.

32. (Previously Presented) The dual capacity compressor as claimed in claim 30, further comprising steps provided between the track part and the limiting part, wherein the steps are parallel to a plane containing both a longitudinal axis of the crank shaft and a longitudinal axis of the crank pin.

33. (Previously Presented) The dual capacity compressor as claimed in claim 30, further comprising steps provided between the track part and the limiting part, wherein the steps are spaced apart from a plane containing both a longitudinal axis of the crank shaft and a longitudinal axis of the crank pin by a half of a thickness of the key member.

34. (Previously Presented) The dual capacity compressor as claimed in claim 30, further comprising steps provided between the track part and the limiting part, wherein at least one of the steps is sloped at an angle from a plane containing both a longitudinal axis of the crank shaft and a longitudinal axis of the crank pin by a half of a thickness of the key member.

35. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the eccentric sleeve includes a ring member provided between a bottom surface of the eccentric sleeve and a top surface of the crank shaft.

36. (Canceled).

37. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight prevents rotation of the eccentric sleeve due to a rotational moment.

38. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight prevents a rotational moment from being generated at the eccentric sleeve.

39. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight positions a center of gravity of the eccentric sleeve on a plane

containing both a longitudinal axis of the crank shaft and a longitudinal axis of the crank pin.

40. (Canceled).

41. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight generates a rotational moment in a direction that is opposite to a rotation direction.

42. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight shifts a center of gravity of the eccentric sleeve to an opposite position with respect to a plane containing both a longitudinal axis of the crank shaft and a longitudinal axis of the crank pin.

43. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight is provided with a part of the eccentric sleeve having a relatively light weight.

44. (Previously Presented) The dual capacity compressor as claimed in claim 1, wherein the balance weight is provided with a track part of the eccentric sleeve.

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45. (Canceled).